

Publications

2. Publications

a) Refereed Journals

Behiry, A. A. M. R., Dafar, T., Hassan, A. E. M., Hassan, F., AlGohary, A., & Khanafer, M. (2025). Nu-A Marine Life Monitoring and Exploration Submarine System. *Technologies*, 13(1), 41. <https://doi.org/10.3390/technologies13010041>

Kandil, A.; Khanafer, M.; Darwiche, A.; Kassem, R.; Matook, F.; Younis, A.; Badran, H.; Bin-Jassem, M.; Ahmed, O.; **Behiry, A.**; et al. A Machine-Learning-Based and IoT-Enabled Robot Swarm System for Pipeline Crack Detection. *IoT* 2024, 5, 951-969. <https://doi.org/10.3390/iot5040043>

M. K. Awad, **A. A. M. R. Behiry**, M. W. Baidas, "User association for load balancing in coordinated multipoint green HetNets: A Quasi-Newton-based approach", *Physical Communication*, Volume 49, 2021, 101464, ISSN 1874-4907, <https://doi.org/10.1016/j.phycom.2021.101464>.

M. K. Awad, **A. A. M. R. Behiry** and E. A. Alrashed, "A Robust and Resilient Load Balancing Framework for SoftRAN-Based HetNets With Hybrid Energy Supplies," in *IEEE Transactions on Network and Service Management*, vol. 17, no. 3, pp. 1403-1417, Sept. 2020, doi: 10.1109/TNSM.2020.2991339.

S. Abed, **A. A. M. R. Behiry**, I. Ahmad. Error metrics determination in functionally approximated circuits using SAT solvers. 2020. *PLOS ONE* 15(1): e0227745. <https://doi.org/10.1371/journal.pone.0227745>

b) Conferences

A. Kandil et al., "Pipeline Leak Identification Emergency Robot Swarm (PLIERS)," *2023 20th Annual IEEE International Conference on Sensing, Communication, and Networking (SECON)*, Madrid, Spain, 2023, pp. 381-383, doi: 10.1109/SECON58729.2023.10287512.

A. Behiry, A. Imdoukh, A. AlAteyah, F. Badreddine, R. AlFar and A. Rezk, "Towards a Selfmanaged and Gamified Laboratory Experience in Undergraduate Engineering Education," *2023 IEEE Global Engineering Education Conference (EDUCON)*, Kuwait, Kuwait, 2023, pp. 1-5, doi: 10.1109/EDUCON54358.2023.10125169.

A. Al-Kandari, A. -Z. AlMuzaini, A. Al-Humaidan, H. Al-Jouhari, S. Esmacili and **A. Behiry**, "VGRIP: Virtual Reality in a GRIP," *2022 International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA)*, 2022, pp. 1-5, doi: 10.1109/HORA55278.2022.9799929.

M. K. Awad and **A. A. M. R. Behiry**, "A Quasi-Newton-based Approach to Load Balancing in Coordinated MultiPoint (CoMP) Green HetNets," *2019 Seventh International Conference on Digital Information Processing and Communications (ICDIPC)*, Trabzon, Turkey, 2019, pp. 72-77, doi: 10.1109/ICDIPC.2019.8723867.

M. Imdoukh, Y. Khalil, **A. Rady** and M. Khanafer, "Zealth: ZigBee-Based WBAN System for e-Health Monitoring," *2017 9th IEEE-GCC Conference and Exhibition (GCCCE)*, Manama, 2017, pp. 1-9, doi: 10.1109/IEEEGCC.2017.8448094.